

Form 1449 (Modified) Information Disclosure Statement By Applicant <i>(Use Several Sheets if Necessary)</i>	Atty Docket No.: IMM121C	Application No.: 09/838,052
	Applicant: Tremblay et al.	
	Filing Date: 4/18/01	Group: 2674

U.S. Patent Documents

#9

Examiner Initial		Patent No.	Date	Patentee	Class	Sub- Class	Filing Date
DL	*	3,919,691	11/11/75	Noll	340	172.5	5/26/71
	*	4,414,984	11/15/83	Zarudiansky	128	774	12/14/78
	*	4,477,043	10/16/84	Repperger	244	223	12/15/82
	*	4,560,983	12/24/85	Williams	340	825	9/17/82
	*	4,604,016	8/5/86	Joyce	414	7	8/3/83
	*	4,706,294	11/10/87	Ouchida	381	109	6/10/86
	*	4,731,603	3/15/88	McRae et al.	340	407	5/19/86
		4,791,416	12/13/88	Adler	340	712	7/12/85
	*	4,795,296	1/3/89	Jau	414	5	11/17/86
	*	4,800,721	1/31/89	Cemenska et al.	60	393	2/13/87
	*	4,823,634	4/25/89	Culver	74	471	11/3/87
	*	4,868,549	9/19/89	Affinito et al.	340	710	5/18/87
		4,885,565	12/5/89	Embach	340	407	6/1/88
	*	4,949,119	8/14/90	Moncrief et al.	364	578	1/12/89
	*	4,983,901	1/8/91	Lehmer	318	685	4/21/89
	*	5,044,956	9/3/91	Behensky et al.	434	45	1/12/89
	*	5,076,517	12/31/91	Ferranti et al.	244	228	8/14/89
	*	5,107,262	4/21/92	Cadoz et al.	341	22	10/12/89
	*	5,146,566	9/8/92	Hollis, Jr. et al.	395	275	5/29/91
	*	5,184,319	2/2/93	Kramer	364	806	2/2/90
	*	5,185,561	2/9/93	Good et al.	318	432	7/23/91
	*	5,186,629	2/16/93	Rohen	434	114	8/22/91
	*	5,193,963	3/16/93	McAfee et al.	414	5	10/31/90
	*	5,203,563	4/20/93	Loper, III	273	148	3/21/91
	*	5,209,661	5/11/93	Hildreth et al.	434	45	
	*	5,220,260	6/15/93	Schuler	318	561	10/24/91
	*	5,223,776	6/29/93	Radke et al.	318	568	12/31/90
	*	5,286,203	2/15/94	Fuller et al.	434	45	10/7/92
DL	*	5,296,871	3/22/94	Paley	345	163	7/27/92

Examiner: <i>Deanna Davis</i>	Date Considered: 4/24/02
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RL	*	5,354,162	10/11/94	Burdea et al.	414	5	8/31/92
	*	5,366,376	11/22/94	Copperman et al.	434	69	5/22/92
	*	5,368,484	11/29/94	Copperman et al.	434	69	2/17/93
	*	5,381,080	1/10/95	Schnell et al.	318	566	2/18/93
	*	5,388,992	2/14/95	Franklin et al.	434	114	6/19/91
	*	5,396,266	3/7/95	Brimhall	345	161	6/8/93
	*	5,399,091	3/21/95	Mitsumoto	434	61	4/26/93
	*	5,405,152	4/11/95	Katanics et al.	273	438	6/8/93
	*	5,414,337	5/9/95	Schuler	318	561	6/11/93
	*	5,451,924	9/19/95	Massimino et al.	340	407.1	1/14/93
	*	5,482,051	1/9/96	Reddy et al.	128	733	3/10/94
	*	5,512,919	4/30/96	Araki	345	156	3/30/93
	*	5,513,100	4/30/96	Parker et al.	364	167.01	6/10/93
	*	5,542,672	8/6/96	Meredith	463	37	3/17/95
	*	5,559,432	9/24/96	Logue	324	207	6/29/94
	*	5,565,840	10/15/96	Thorner et al.	340	407.1	9/21/94
	*	5,576,727	11/19/96	Rosenberg et al.	345	179	6/5/95
	*	5,583,478	12/10/96	Renzi	340	407.1	3/1/95
	*	5,587,937	12/24/96	Massie et al.	364	578	4/25/95
	*	5,589,828	12/31/96	Armstrong	341	20	3/5/92
	*	5,589,854	12/31/96	Tsai	345	161	6/22/95
	*	5,629,594	5/13/97	Jacobus et al.	318	568	10/16/95
	*	5,634,794	6/3/97	Hildreth et al.	434	37	3/23/95
	*	5,642,469	6/24/97	Hannaford et al.	395	99	11/3/94
	*	5,643,087	7/1/97	Marcus et al.	463	38	7/29/94
	*	5,666,138	9/9/97	Culver	345	161	11/22/94
	*	5,666,473	9/9/97	Wallace	345	420	10/8/92
			5,669,818	9/23/97	Thorner et al.	463	30
RL	*	5,684,722	11/4/97	Thorner et al.	364	578	9/21/94

Examiner: <i>Robin Davis</i>	Date Considered: 4/24/02
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Examiner Initial		Patent No.	Date	Patentee	Class	Sub- Class	Filing Date
R	*	5,691,898	11/25/97	Rosenberg et al.	364	190	3/28/96
	*	5,709,219	1/20/98	Chen et al.	128	782	8/1/96
	*	5,714,978	2/3/98	Yamanaka et al.	345	157	12/5/95
	*	5,734,373	3/31/98	Rosenberg et al.	345	161	12/1/95
	*	5,736,978	4/7/98	Hasser et al.	345	173	5/26/95
	*	5,739,811	4/14/98	Rosenberg et al.	345	161	9/27/95
	*	5,742,278	4/21/98	Chen et al.	345	156	11/1/95
	*	5,754,023	5/19/98	Roston et al.	318	561	10/22/96
	*	5,755,577	5/26/98	Gillio	434	262	7/11/96
	*	5,767,839	6/16/98	Rosenberg	345	161	3/3/95
	*	5,781,172	7/14/98	Engel et al.	345	164	6/16/97
	*	5,784,052	7/21/98	Keyson	345	167	3/12/96
	*	5,790,108	8/4/98	Salcudean et al.	345	184	10/23/92
	*	5,805,140	9/8/98	Rosenberg et al.	345	161	11/17/95
		5,816,823	10/6/98	Naimark et al.	434	307	10/9/96
	*	5,889,670	3/30/99	Schuler et al.	364	186	1/11/96
	*	5,889,672	3/30/99	Schuler et al.	364	188	6/3/98
	*	5,897,437	4/27/99	Nishiumi et al.	463	47	10/8/96
	*	5,944,151	8/31/99	Jakobs et al.	188	267.1	7/9/96
	*	5,973,670	10/26/99	Barber et al.*	345	157	12/31/96
	*	5,986,643	11/16/99	Harvill et al.	345	156	10/27/92
	*	6,004,134	12/21/99	Marcus et al.	434	45	5/19/94
	*	6,104,158	8/15/00	Jacobus et al.	318	568.11	6/15/99
	*	6,184,868	2/6/01	Shahoian et al.	345	161	9/17/98
		6,198,206	3/6/01	Saarmaa et al.	310	340	3/20/98
		6,211,861	4/3/01	Rosenberg et al.	345	163	12/7/99
	R	RE37,374	9/18/01	Roston et al.	318	561	11/30/99

Examiner: R. L. [Signature]	Date Considered: 4/24/02
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Other Documents

Examiner Initial		Author, Title, Date, Place (e.g. Journal) of Publication
BK	*	Schmult, Brian et al., "Application Areas for a Force-Feedback Joystick," ASME 1993, DSC-Vol. 49, pp. 47-54.
	*	Howe, Robert D., "Task Performance with a Dextrous Teleoperated Hand System," Proceedings of SPIE, 1992, Vol. 1833, pp. 1-9.
	*	Russo, Massimo Andrea, "The Design and Implementation of a Three Degree-of-Freedom Force Output Joystick," Department of Mechanical Engineering, May 11, 1990, pp. 9-40 & 96 & 97.
	*	Su, S. Augustine et al., "The Virtual Panel Architecture: A 3D Gesture Framework," IEEE 0-7803-1363-1, 1993.
	*	Hasser, Christopher John, "Tactile Feedback for a Force-Reflecting Haptic Display," The School of Engineering, University of Dayton, December 1995, pp. iii-xii & 1-96.
	*	Ellis, R.E. et al., "Design and Evaluation of a High-Performance Prototype Planar Haptic Interface," ASME December 3, 1993, DSC-Vol. 49, pp. 55-64.
	*	Burdea, Grigore et al., "A Portable Dextrous Master with Force Feedback," Presence: Teleoperators and Virtual Environments, MIT Press, June 1991.
	*	Adlestein, Bernard D. et al., "Design and Implementation of a Force Reflecting Manipulandum for Manual Control Research," 1992, pp. 1-24.
	*	Minsky, Margaret et al., "Feeling and Seeing: Issues in Force Display," ACM 089791-351-5, 1990, pp. 235-242.
	*	Ouh-young, M. et al., "Creating an Illusion of Feel: Control Issues in Force Display," Computer Science Dept., Univ of N. Carolina, 1989, pp. 1-14.
	*	Millman, P. et al., "Design of a Four Degree-of-Freedom Force-Reflecting Manipulandum with a Specified Force/Torque Workspace," IEEE CH2969-4, 1991, pp. 1488-1492.
	*	Kilpatrick, P., "The Use of a Kinesthetic Supplement in an Interactive Graphics System," Univ. of N. Carolina, 1976, pp. 1-175.
	*	Akamatsu, M. et al., "Multimodal Mouse: A Mouse-Type Device with Tactile and Force Display," Presence, Vol. 3, No. 1, 1994, pp. 73-80.
	*	Hirota, K. et al., "Development of Surface Display," IEEE 0-7803-1363-1, 1993, pp. 256-262.
	*	Atkinson, W. et al, "Computing with Feeling," Comput. & Graphics, Vol. 2, 1977, pp. 97-103.
	*	Brooks, F. et al., "Project GROPE-- Haptic Displays for Scientific Visualization," Computer Graphics, Vol. 24, No. 4, 1990, pp. 177-185.
	*	Batter, James J. et al., "Grove-1: A Computer Display to the Sense of Feel," Proc. IFIP Congress, 1971, pp. 759-763.
	*	Winey III, C., "Computer Simulated Visual and Tactile Feedback as an Aid to Manipulator and Vehicle Control," Mass. Institute of Tech., Mech. Engineering, 1981, pp. 1-79.
	*	Burdea, G. et al., "Distributed Virtual Force Feedback," IEEE Workshop on Force Display on Virtual Environments and its Application to Robotic Teleoperation," 1993, pp. 25-44.
BK	*	Hasser, C. et al., "Tactile Feedback with Adaptive Controller for a Force-Reflecting Haptic Display," Parts 1&2, IEEE 0-7803-3131-1, 1996, pp. 526-533.

Examiner: <i>Deanna Mark</i>	Date Considered: <i>4/24/02</i>
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Other Documents

Examiner Initial		Author, Title, Date, Place (e.g. Journal) of Publication
R.	*	Kelley, A. J. et al., "MagicMouse: Tactile and Kinesthetic Feedback in the Human-Computer Interface using an Electromagnetically Actuated Input/Output Device," Dept. of Elec. Eng., Univ. of Brit. Columbia, 1993, pp. 1-27.
	*	Wiker, Steven F. et al., "Development of Tactile Mice for Blind Access to Computers: Importance of Stimulation Locus, Object Size, and Vibrotactile Display Resolution," Proceedings of the Human Factors Society 35th Annual Meeting 1991, pp. 708-712.
	*	Gotow, J.K., et al., "Perception of Mechanical Properties at the Man-Machine Interface," IEEE 1987, pp. 688-689.
	*	Iwata, Hiroo, "Artificial Reality with Force-feedback: Development of Desktop Virtual Space with Compact Master Manipulator," Computer Graphics, Vol. 24, No. 4, 1990, pp.165-170.
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	*	Rinaldi, P., "Digital Control Loading – A Modular Approach," International Air Transport Association 6 th Meeting of the Flight Simulator Technical Sub-Committee, Montreal, June 1-4, 1982.
	R.	*

Examiner: <i>Alvin L. ...</i>	Date Considered: 4/24/02
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Other Documents

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R1	*	Baigrie, Stephen A., Reflectone Inc., "Electric Control Loading – A Low Cost, High Performance Alternative," American Defense Preparedness Association 12 th Interservice/Industry Training System Conference, Nov. 6-8, 1990.
	*	"Digital Control Loading", Giel et al., Summary, Paper 1, Paper 2, Paper 3, International Air Transport Association, Seventh Flight Simulator Technical Sub-Committee Meeting, Agenda Item 10, Montreal, Sept. 17-20, 1984.
	*	Seidensticker, Steve, "Application of Microcomputers to the Simulator 'Linkage' Problem," National Security Industrial Association 4 th Interservice/Industry Training Equipment Conference Proceedings, Nov. 16-18, 1982.
	*	Albers, F. Gerry, "Microcomputer Base for Control Loading," Naval Training Equipment Center 11 th NTEC-Industry Conference Proceedings, NAVTRAEQUIPCEN IH-306, Nov. 14-16, 1978.
RA	*	Flight Simulation, Rolfe, J.M. and Staples, K. J., eds., 1986.

Examiner: <i>Denise L. [Signature]</i>	Date Considered: 4/24/02
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